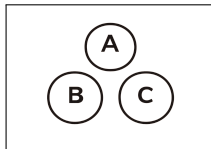


19

Discrete Distribution Bernoulli Trials

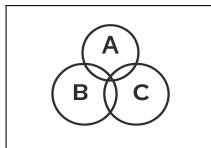
B



$$n = 2$$

$$p = 0.50$$

$$k = 1$$

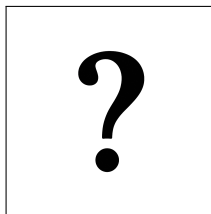


$$P(X = k) = \binom{n}{k} (p)^k (1 - p)^{n-k}$$

$$P(X = 1) = \binom{2}{1} (0.50)^1 (0.50)^1$$

$$P(X = 1) = 2 \times 0.50 \times 0.50$$

$$P(X = 1) = \boxed{0.50}$$



$$n = 4$$

$$p = 0.25$$

$$k = 2$$

$$P(X = 2) = ?$$

19

Discrete Distribution Bernoulli Trials

B



$$\begin{aligned}n &= 4 \\p &= 0.25 \\k &= 2 \\P(X = 2) &= ?\end{aligned}$$

$$\begin{aligned}P(X = 2) &= \binom{4}{2} (0.25)^2 (0.75)^2 \\P(X = 2) &= 6 \times 0.0625 \times 0.5625 \\P(X = 2) &= 0.2109375\end{aligned}$$